

Bibliometric Analysis of Conversational Marketing

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ABSTRACT

This study aims to map and analyze the intellectual structure, thematic evolution, and research trends in conversational marketing using a bibliometric approach. Data were collected from the Scopus database using relevant keywords related to conversational marketing, artificial intelligence, chatbots, and digital interaction. The analysis was conducted using bibliometric techniques, including co-occurrence, co-authorship, and thematic mapping, supported by visualization tools such as VOSviewer. The findings reveal that conversational marketing has developed as an interdisciplinary field, with artificial intelligence serving as the central foundation linking marketing, communication, and user experience. The results also indicate a clear evolution of research themes, from early communication-focused studies to the integration of machine learning and natural language processing, and more recently toward advanced conversational AI, personalization, and customer experience. Furthermore, the study identifies emerging topics such as anthropomorphism, large language models, and conversational commerce as key directions for future research. This study contributes by providing a comprehensive overview of the field and highlighting potential avenues for further theoretical and empirical development in conversational marketing.

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1. INTRODUCTION

The rapid evolution of digital communication technologies has fundamentally transformed the way businesses interact with consumers. Over the past decade, marketing strategies have shifted from one-way communication models toward more interactive, personalized, and real-time engagement approaches. Among these emerging strategies, conversational marketing has gained significant attention as a method that leverages dialogue-driven interactions to build relationships, enhance customer experience, and drive conversions.

Powered by advancements in artificial intelligence, chatbots, and messaging platforms, conversational marketing enables organizations to communicate with customers in a more human-like, responsive, and context-aware manner [1], [2].

The growing popularity of conversational marketing is closely linked to the increasing adoption of messaging applications and digital assistants. Consumers today expect immediate responses and personalized solutions, which traditional marketing channels often fail to deliver. Conversational tools such as live chat

systems, AI-driven chatbots, and voice assistants provide businesses with the capability to engage users instantly, addressing inquiries, recommending products, and guiding purchasing decisions in real time. This shift reflects a broader trend toward customer-centric marketing, where the focus lies on creating meaningful interactions rather than simply delivering promotional messages [3], [4].

In addition, the integration of big data analytics and machine learning technologies has significantly enhanced the effectiveness of conversational marketing. By analyzing user behavior, preferences, and interaction patterns, companies can tailor conversations to individual needs, thereby improving engagement and satisfaction. This data-driven approach not only increases conversion rates but also strengthens brand loyalty. As a result, conversational marketing is increasingly viewed as a strategic tool for achieving competitive advantage in the digital marketplace [5].

Despite its growing importance, the academic literature on conversational marketing remains fragmented and dispersed across various disciplines, including marketing, information systems, communication studies, and computer science. Researchers have explored different aspects of conversational marketing, such as chatbot design, customer engagement, user experience, and technological adoption. However, there is still a lack of comprehensive understanding regarding the development, trends, and intellectual structure of this research field. This fragmentation makes it difficult for scholars and practitioners to identify key themes, influential works, and emerging research directions [6].

Bibliometric analysis offers a systematic and quantitative approach to examining the evolution of a research field by analyzing patterns in academic publications, citations, and collaborations. Through techniques such as co-citation analysis, keyword mapping, and network visualization, bibliometric studies can reveal the underlying structure and dynamics of

scholarly knowledge. Applying bibliometric analysis to conversational marketing research can provide valuable insights into its growth trajectory, major contributors, dominant themes, and future opportunities. Such an analysis is essential for advancing theoretical development and guiding practical applications in this rapidly evolving domain [7].

Although conversational marketing has emerged as a prominent topic in both academic and practical contexts, the existing body of literature lacks a comprehensive and systematic synthesis. Current studies tend to focus on specific technologies or applications, resulting in a fragmented understanding of the field. There is limited knowledge about the overall development patterns, key research clusters, influential authors, and thematic evolution of conversational marketing. Without a structured overview, it becomes challenging for researchers to identify research gaps and for practitioners to apply insights effectively. Therefore, a bibliometric analysis is needed to map the intellectual landscape of conversational marketing and provide a clearer, evidence-based understanding of its progression and future directions. The primary objective of this study is to conduct a comprehensive bibliometric analysis of conversational marketing literature in order to identify its intellectual structure, research trends, and key contributors

2. METHODS

This study employs a bibliometric analysis approach to systematically examine the body of literature on conversational marketing. Bibliometric analysis is a quantitative research method used to evaluate academic publications through statistical and mathematical techniques, enabling the identification of patterns, trends, and relationships within a specific research field [7]. The method is particularly suitable for this study because it allows for a comprehensive and objective assessment of large volumes of scholarly data. By analyzing publication outputs, citation structures, and keyword

occurrences, this study aims to uncover the intellectual structure and developmental trajectory of conversational marketing research.

The data for this study are collected from reputable academic databases such as Scopus and Web of Science, which are widely recognized for their extensive coverage of peer-reviewed literature. A systematic search strategy is applied using relevant keywords, including “conversational marketing,” “chatbots,” “AI marketing communication,”

and “interactive marketing,” within titles, abstracts, and keywords. Inclusion criteria are established to ensure data quality, such as selecting only journal articles and conference papers published in English within a defined time frame. Duplicate records and irrelevant publications are removed through a screening process. The final dataset is then exported in compatible formats for further analysis using bibliometric software tools such as VOSviewer and [8].

3. RESULTS AND DISCUSSION

3.1 Keyword Co-Occurrence Network

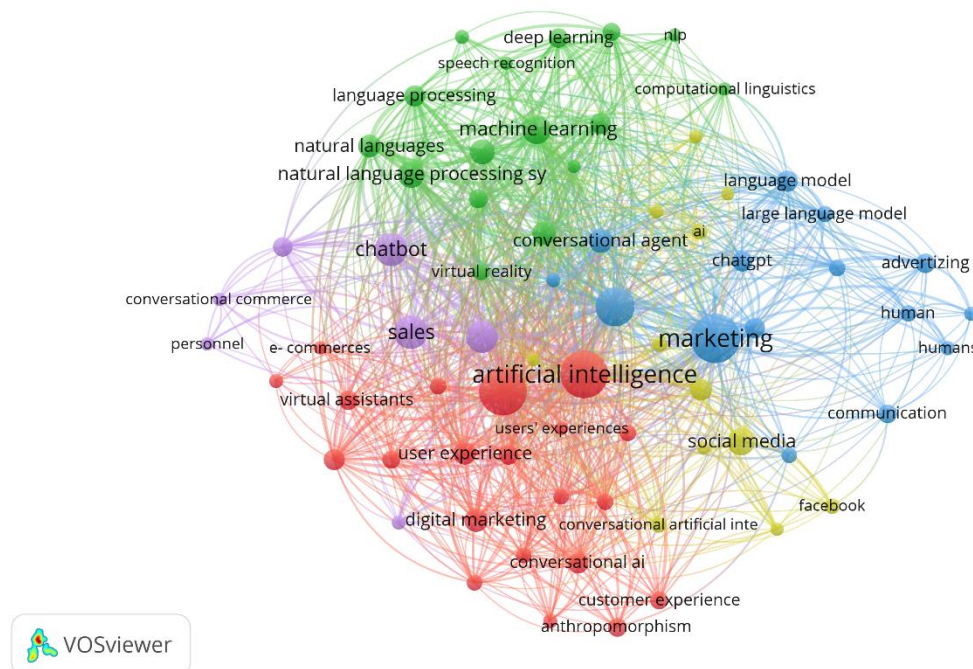


Figure 1. Network Visualization

Source: Data Analysis Result, 2026

Figure 1 reveals that conversational marketing is a highly interdisciplinary field, positioned at the intersection of artificial intelligence, marketing, and communication studies. The most central node appears to be artificial intelligence, which connects strongly with marketing, user experience, and chatbot-related concepts. This indicates that the literature is anchored in technological advancements, with AI serving as the backbone that enables conversational interactions between firms and customers.

The density of connections suggests that research in this domain is rapidly expanding and increasingly integrated.

The red cluster, centered around artificial intelligence, user experience, and digital marketing, highlights a dominant research stream focused on customer-centric outcomes. Studies in this cluster emphasize how conversational technologies—such as chatbots and virtual assistants—enhance user experience, personalize interactions, and influence customer journeys. The presence of

terms like anthropomorphism suggests a growing interest in making AI interactions feel more human-like, which is critical in shaping trust and engagement in conversational marketing contexts.

The green cluster reflects the technological foundation of conversational marketing, with keywords such as machine learning, natural language processing, deep learning, and computational linguistics. This cluster indicates that a significant portion of the literature is rooted in technical disciplines, focusing on how conversational agents are developed and optimized. The strong linkage between these terms and chatbot or conversational agent suggests that advancements in language processing technologies directly influence the evolution of marketing applications.

The blue cluster, centered around marketing, communication, advertising, and large language models, represents the strategic and communication-oriented

perspective of the field. This cluster shows how conversational marketing is increasingly being integrated into broader marketing strategies, including advertising and social media engagement. The inclusion of emerging concepts like large language models and ChatGPT signals a recent shift toward more advanced AI systems, which are transforming how brands communicate at scale while maintaining personalization.

The purple and yellow clusters illustrate the commercial and platform-based applications of conversational marketing. Terms such as sales, e-commerce, conversational commerce, and social media indicate that research is moving toward practical implementation in business environments. These clusters demonstrate that conversational marketing is not only a theoretical construct but also a strategic tool for driving sales, enhancing customer interaction, and leveraging platforms like social media.

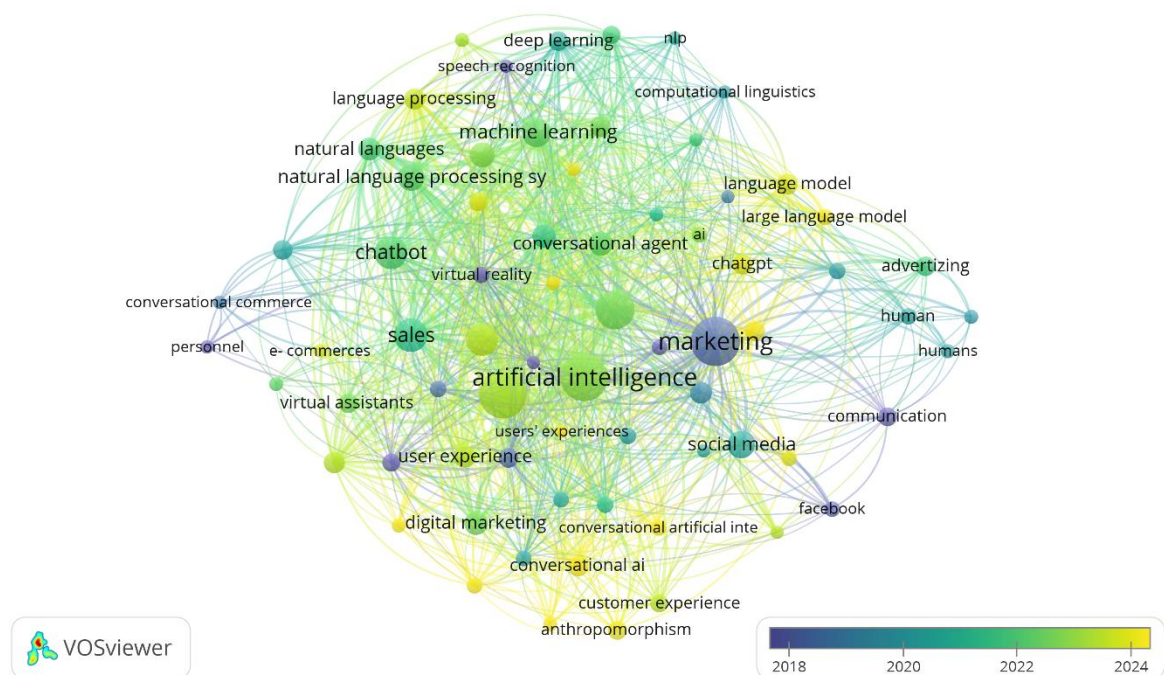


Figure 2. Overlay Visualization

Source: Data Analysis Result, 2026

Figure 2 highlights the temporal evolution of conversational marketing research, where color intensity represents the average publication year of each keyword.

Earlier studies (shown in darker blue tones, around 2018–2020) are concentrated on foundational concepts such as marketing, communication, advertising, and human

interaction. This indicates that initial research framed conversational marketing within traditional marketing communication paradigms, focusing on how digital channels mediate interaction between firms and customers rather than on advanced technologies themselves.

As the field progresses into the middle period (green tones, around 2020–2022), the focus shifts toward technological integration, particularly around artificial intelligence, machine learning, natural language processing, and chatbots. During this phase, research begins to bridge technical capabilities with marketing applications, emphasizing how conversational agents can enhance customer engagement and automate service processes. The emergence of terms like

conversational agent and user experience reflects a growing interest in aligning technological sophistication with user-centered design.

In the most recent period (yellow tones, around 2023–2024), the literature shows a clear movement toward advanced AI-driven and experience-oriented themes, including conversational AI, customer experience, anthropomorphism, and the appearance of large language models and ChatGPT. This suggests that the field is entering a more mature stage, where the emphasis is not only on deploying conversational technologies but also on optimizing their human-like qualities, personalization, and strategic impact on customer relationships.

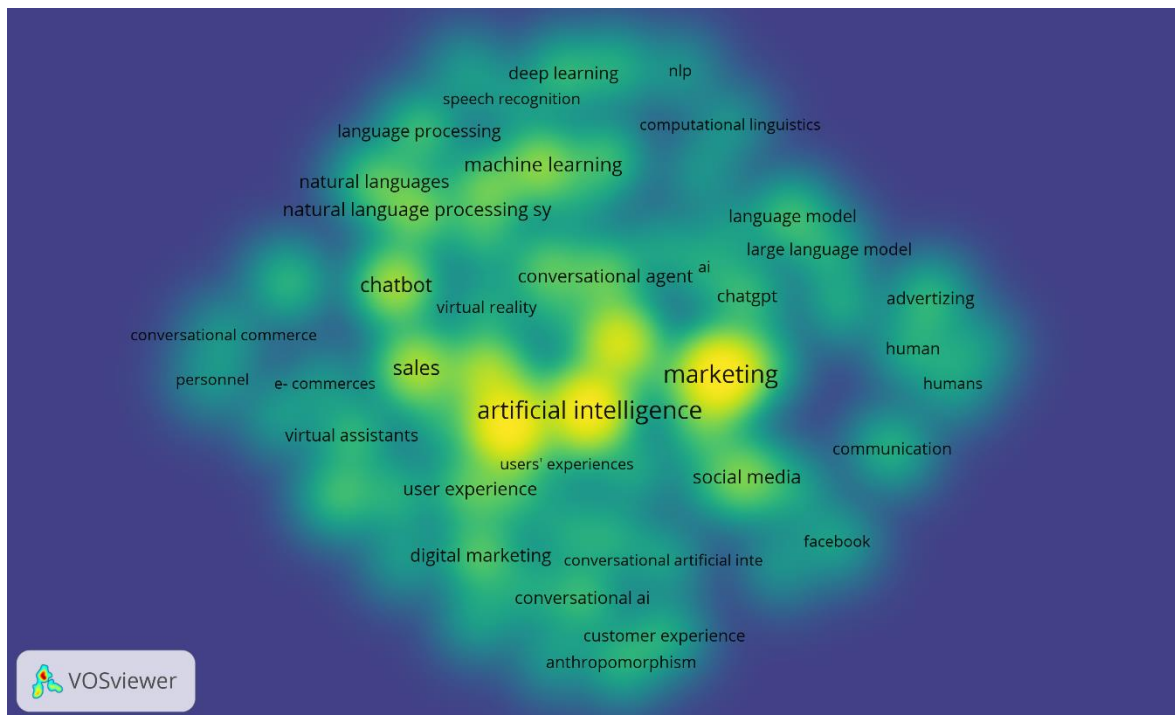


Figure 3. Density Visualization

Source: *Data Analysis Result, 2026*

Figure 3 highlights the core concentration of research themes in conversational marketing, where brighter (yellow) areas indicate higher frequency and stronger co-occurrence of keywords. The most intense region centers around artificial intelligence, marketing, and sales, suggesting that the field is heavily anchored in the integration of AI technologies within

marketing and commercial activities. This central density reflects that the majority of studies focus on how AI-driven tools—such as chatbots and conversational agents—are applied to enhance marketing performance, customer interaction, and ultimately sales outcomes.

Surrounding this core, moderately dense areas (green tones) include themes such

as user experience, digital marketing, social media, and customer experience, indicating that research is expanding toward understanding the experiential and relational aspects of conversational marketing. More peripheral and less dense areas (blue tones),

such as natural language processing, deep learning, and computational linguistics, show that while technical foundations are important, they are less dominant compared to application-oriented discussions.

3.3 Citation Analysis

Table 1. Top Cited Research

Citations	Authors and year	Title
3217	[9]	“So what if ChatGPT wrote it?” Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy
311	[10]	On the Design of and Interaction with Conversational Agents: An Organizing and Assessing Review of Human-Computer Interaction Research
290	[11]	ChatGPT and consumers: Benefits, Pitfalls and Future Research Agenda
290	[12]	Knowledge Graphs: Methodology, Tools and Selected Use Cases
288	[13]	Spreading Social Media Messages on Facebook: An Analysis of Restaurant Business-to-Consumer Communications
256	[14]	Cutting through Content Clutter: How speech and image acts drive consumer sharing of social media brand messages
241	[15]	Unleashing the power of word of mouth: Creating brand advocacy to drive growth
227	[16]	Adoption and impacts of generative artificial intelligence: Theoretical underpinnings and research agenda
189	[17]	Learning from the Dark Web: leveraging conversational agents in the era of hyper-privacy to enhance marketing
179	[18]	The effect of social presence and chatbot errors on trust

Source: Scopus, 2026

Discussion

The findings of this bibliometric analysis indicate that conversational marketing has evolved as a convergence domain where artificial intelligence, marketing strategy, and customer interaction intersect in a tightly integrated knowledge structure. The network and density visualizations consistently position artificial intelligence as the intellectual core, closely linked with marketing and sales-oriented constructs. This pattern reflects a shift in marketing thought, where interaction is no longer mediated solely through static channels but is increasingly shaped by adaptive, real-time communication systems. Rather than treating technology as a supporting tool, the literature places AI at the center of value creation, redefining how firms

initiate, sustain, and scale customer relationships.

At the same time, the prominence of user experience, customer experience, and digital marketing signals a strong movement toward experiential and relational perspectives. The field is no longer limited to technological deployment but is increasingly concerned with how conversational interfaces shape perceptions, trust, and engagement. The emergence of themes such as anthropomorphism suggests that researchers are paying closer attention to the human-like qualities of AI agents, particularly in how these qualities influence emotional responses and interaction quality. This indicates a conceptual shift from efficiency-driven automation toward experience-driven interaction, where the success of conversational marketing depends on its

ability to simulate meaningful human communication.

The temporal overlay further reveals a clear trajectory in the development of the field. Early research was rooted in communication and advertising frameworks, emphasizing digital channels and human interaction. This was followed by a phase characterized by the integration of machine learning, natural language processing, and chatbot technologies into marketing applications. More recent contributions highlight the rise of advanced systems such as large language models and generative AI, accompanied by a growing emphasis on personalization and conversational intelligence. This progression illustrates how the field has matured from foundational exploration to more sophisticated, AI-enabled ecosystems that prioritize contextual understanding and adaptive engagement.

Despite these advances, the analysis also uncovers several gaps that warrant further investigation. Much of the existing literature remains concentrated on technological capabilities and firm-level applications, with limited attention to contextual variations such as cultural settings, small and medium-sized enterprises, and emerging markets. In addition, while customer experience is frequently discussed, there is still a need for deeper theoretical integration with broader frameworks such as customer journey mapping and relationship

marketing. Future research may also benefit from examining the ethical and psychological dimensions of conversational marketing, particularly in relation to data privacy, transparency, and user trust. These directions open space for developing a more comprehensive and context-sensitive understanding of conversational marketing as both a technological and social phenomenon.

4. CONCLUSION

This study provides a comprehensive bibliometric mapping of conversational marketing, revealing its evolution into an interdisciplinary field anchored in artificial intelligence and increasingly oriented toward customer experience and strategic marketing applications. The findings show a clear transition from communication-based foundations to technology-enabled interaction, and more recently toward advanced AI-driven ecosystems that emphasize personalization and human-like engagement. The dominance of themes related to artificial intelligence, marketing, and user experience underscores the central role of conversational technologies in reshaping how firms interact with customers. At the same time, the study highlights the need for broader contextual and theoretical development, particularly in integrating experiential, ethical, and market-specific perspectives.

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